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DEPOSIT CURRENCY AND ITS VELOCITY OF CIRCULATION IN JAPAN

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I

The growth of so-called credit economy is usually accompanied by changes in the composition of the money circulating within a national economy. The exchange of goods and services which was once mediated principally by coins, bank-notes and paper money, is now accomplished largely by such media of transactions as checks, bills and transfers, of which transfers of bank deposits by means of checks constitute the most important element. In consequence of this new development, there appeared, first in the United States, the idea that checks, or bank deposits against which checks are drawn, represented a kind of money, and since C. F. Dunbar advanced his theory,[1] which claimed that bank deposits were a kind of currency, studies in deposit currency have been undertaken in many countries.

In Japan credit economy is of relatively recent origin, the modern system of banking having been instituted only after the Meiji Restoration. The gold standard established in 1897, however, encouraged a rapid growth of credit economy, and soon deposit currency became an important factor in our national economy. Because of this relatively recent adoption of credit economy, it is only during the past fifteen years or so that deposit currency has begun to attract wide attention as subject-matter for scientific studies. In the early years of Showa an excessive and ill-advised extension of bank credits developed into a financial panic, as a result of which the question of restricting bank credits with a view to

1) C. F. Dunbar, " Deposit as Currency," Quarterly Journal of Economics, 1887.

counteracting depression gave rise to serious discussions which treated the matter as of prime political and economic importance. The nature of these discussions can be illustrated by the fact that in drafting the Banking Act, the Committee for Inquiry into Financial Organizations carried on most heated discussions regarding the advisability of establishing legal reserve rates against deposit liabilities. Later, along with the progress of the so-called quasi-wartime economy subsequent to the Manchurian Incident and the attendant expansion of national finance, the imminent threat of inflation became a matter of serious public concern. In consequence of the fact that this inflation did not develop into cash inflation, but was restricted to deposit currency, considerable public interest was aroused in connection with the whole question of deposit currency.

Thus studies in this country of the problems of deposit currency have developed rapidly, both in the theoretical and the practical fields, within a relatively short period of time. In the books I have already published,[2] I have undertaken detailed studies of this subject, including such theoretical problems as the argument as to whether deposit currency is money or a substitute for money, the means and extent to which a banking system can extend credit, the relation of deposit currency to capital and various theories of business fluctuations, the policies that may be adopted theoretically in connection with deposit currency: and such practical problems as the quantity and velocity of circulation of deposit currency and its relation to commodity prices, etc. The present study is concerned not so much with my views about the theoretical problem indicated by the title as with the practical problems and methods involved in estimating the quantity of deposit currency and its velocity of circulation, and also with an analysis of the various studies that have been undertaken in this connection. However, in

2) M. Nakatani, *A Study in Deposit Currency*, 1934, and *New Theory of Money* and *Credit* 1838.

seeking a definition and in making a quantitative analysis of deposit currency, it is necessary to determine its essential characteristics, and hence I propose to begin with a brief discussion as to whether or not deposit currency is actually money.

It is my contention that the most fundamental criterion of money is its function as a generally accepted medium of exchange, and since deposit currency performs this function, it should be regarded as a money. This contention is disputed in this country by many students, most of whom are metalists, who claim that the most essential function of money is a measure of value and that only gold performs this function satisfactorily. Since this particular question is of secondary significance in the present study, and since I have treated it in detail in the works already published,[3] I shall answer this question here merely with the following statement. Metalists who claim that gold alone constitutes money maintain an essentially individualistic view point in its definition of money. While this position may be permissible with reference to international money which flows between independent states, it is untenable with respect to the money that circulates within a unit of national economy.

II

In order to determine the quantity and the velocity of circulation of deposit currency in Japan, it is necessary to define, first of all, the nature of deposit currency itself. Adopting the point of view that deposit currency is a kind of money which constitutes a generally accepted medium of exchange, I contend, in accordance with the theory accepted in many countries, that demand deposits kept in banks and other financial institutions, against which checks are drawn, constitute deposit currency. This position is disputed by many students, whose theories will be briefly discussed.

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3) *A Study in Deposit Currency*, Chapt. 2; *New Theory of money and Creidt*, Book I, Chapt 1.

1. The theory that regards checks as deposit currency.[4] According to the exponent of this theory, one of the essential characteristics that makes deposit currency a generally accepted medium of exchange is its easy transferability, and while checks meet this requirement, deposits do not. It is argued that a deposit is an abstract concept, which, in itself has no purchasing power, and that the theory which regards deposits as deposit currency is incapable of explaining overdrafts. For these reasons, the adherents of this theory claim that it is more appropriate to consider checks as deposit currency.

Bank deposits, however, invariably give the depositor a right to draw checks against them and they are made transferable by means of checks. Between depositors of one bank, they are transferable even without the mediation of checks. Moreover the claim that deposits have no purchasing power is based upon the erroneous assumption that purchasing power must always be represented by some concrete object. In reality, however, deposits can be regarded as an indication of the existence of purchasing power. The fallacy of the theory under discussion can be proved by the fact that dishonored checks, which are not covered by deposits, fail to complete exchange transactions. As for overdrawn checks, our theory may appear to fail to provide a satisfactory explanation inasmuch as these checks constitute effective media of transaction even in the absence of corresponding deposits. However, this difficulty can be overcome by a variant interpretation, namely, that overdrawn checks are issued within the agreed limit, and not merely without reference to corresponding deposits, but against corresponding deposits created at the moment of issue.

Moreover, the theory under review involves certain difficulties in making statistical measurements of the quantity and velocity of circulation of deposit currency. For example, should it be granted that the quantity of deposit currency

4) Dr. S. Hijikata is numbered among the adherents of this theory.

is represented by the total amount of checks drawn within a specific period of time, it would be absurd to consider its velocity of circulation either as 1 or as represented by the number of times these checks were transferred from one hand to another before they were either cashed or deposited with banks.

2. The theory that regards deposits as money solely when they serve as means of payment. The followers of this theory claim that deposits as such cannot be regarded as money, but that they become money only when they are used as means of payment. This point of view is supported by the Banking School in their theory of credits, its leading exponent in this country being Dr. Shotaro Kojima. According to this latter scholar, bank deposits are used as means of payment either when converted into cash or in a state of deposit, while deposits become money only in the latter instance. A deposit, therefore, is latent money which is in a state of suspense prior to functioning as money. Thus, bank deposits are potential money which forms the basis of cash or deposit money, and as such there ought to be no distinction among the various kinds of bank deposits.[5)]

This theory of Dr. Kojima is based upon the assumption that while deposit currency is essentially money, bank deposits possess, in addition to being money, such further characteristics as savings, means of money-making, etc., and that bank deposits are applied to payment not always as deposit, but frequently after being converted into cash.

It is true that bank accounts are maintained partly for the purposes of savings and money-making. But, current deposits (demand deposits withdrawable only by checks) are essentially a means of payment. Moreover, of the various kinds of demand deposits, special current deposits (repayable only in cash) should be excluded from the category of deposit money. It should be remembered, however, because special current

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5) S. Kojima. *Dynamic monetary Theory*, pp. 141—147, 222—223.

deposits bear slightly higher rates of interest than current deposits, that there is a common practice in this country of transferring a part of these deposits to current deposits, at the time of account settlement such as month-ends and year-ends, when they are applied to payment. It goes without saying, therefore, that some allowance must be made in this respect in estimating the quantity of deposit currency.

As for the contention that deposit currency is latent money or a basis of money, we note that strong support is given, not only in Japan but in other countries as well, to the theory that all money not in actual use ought to be excluded from the category of true money. While this theory is by no means untenable, it might lead to the conclusion that even the coins kept in our pockets became money only when they were actually used for payment.

Let us consider, in the next place, the objections that may be raised against the argument which regards all bank deposits alike, without any reference to classification. In this respect, it is argued by L. Currie that, "the criterion for deciding whether time deposit should be classified as money .....is whether.....payment is made by the direct transference of time deposits without the use of demand deposits or cash."[6] As against this contention, A. W. Marget states, "but it must be obvious that those who would regard 'time deposits' as 'money' might easily retort that if the fact that a 'deposit' may haye to be changed by its owner into other forms of 'money' before it is spent means that the 'deposit' is not 'money', then a considerable volume of 'demand deposits' are likewise not 'money', since they, too, may have to be turned into 'cash' before they are spent as, for example, in the case of the internal drain."[7]

According to Dr. Kojima, time deposits can be used for payment at any time by obtaining loans or overdrafts against

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6) L. Currie, The Supply and Control of Money in the United States, 1934, p. 14.

7) A. W. Marget, The Theory of Prices, Vol. 1, 1938, p. 467.

their hypothecation.[8] However, according to the usual practice followed in this country, in the case of loans made against time deposits, there can be no agreement in amount as well as in time between the increase in money and the decrease in latent money, as there is in case of transfer of special current deposits into cash. In other words, when a loan or advance is made and applied to payment, it is not accompanied by a decrease of the same amount in time deposits. Furthermore, these loans are not free from interest payment, nor do they bear the same rate of interest as accrues on the corresponding time deposits. For these reasons, I do not concur in Dr. Kojima's theory which seeks to treat all kinds of deposits alike and without distinction.

In short, while there are many conflicting opinions as to what constitutes deposit currency, I hold that deposit currency is represented essentially by current deposits kept in banks.

III.

In A Treatise on Money, J. M. Keynes states that savings deposits comprise a part of total deposits and accordingly that they are a part of the total stock of bank-money.[9] Contrary to this contention, I hold, for the reasons just stated, that in Japan, strictly speaking, demand deposits in banks alone provide the basis for the computation of the quantity of deposit currency. It follows, then, that those deposits which are known in the United States as time deposits, in Japan as fixed deposits, and in England as deposit accounts ought to be excluded from the quantity of deposit currency. For this very reason, the study of deposit currency is very much facilitated in Japan where total amounts of various kinds of deposits have always been reported separately, as compared with England where only combined figures are reported for both current accounts and deposit accounts.[10]

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8) S. Kojima, *op. cit.*, p. 223.
9) J. M. Keynes, A Treatise on Money, II, p. 7.
10) W. Leaf, Banking, 1929, pp. 118, 124.

Thus, roughly speaking, the quantity of deposit currency in Japan can be deduced from the total amount of current deposits with banks. However, there are many considerations that must be kept in view in this connection. In the first place, not all current deposits can be included in such estimation. Private deposits with the central bank, namely, the Bank of Japan, while designated as current deposits, represent largely clearing reserves of various commercial banks, and ordinarily do not function as money available for transfer by checks.[11] Hence inclusion of these deposits may double the actual quantity of deposit currency. On the other hand, the Government deposits with the Bank of Japan should not be excluded from deposit currency, inasmuch as they are subject to withdrawal by checks. A substantial amount of the current deposits held by such special banks as the Japan Hypothec Bank, etc., with the exception of the Bank of Japan, should also be computed as a part of deposit currency in so far as they are subject to withdrawal by checks.

With reference to current deposits with ordinary commercial banks, it should be pointed out that not all the deposits constitute data for computation, since there are certain deductions that must be made from a theoretical point of view. For example, deposits held by ordinary commercial banks usually include deposits by other commercial banks, and these must be excluded in order to avoid duplication. Furthermore, it is argued by Prof. Fisher that when a merchant issues a check to another merchant, the latter deposits it in his bank, with the result that the latter's account is increased to that extent; however, pending the clearance of the check, the first merchant's account does not show a corresponding decrease. It would follow, according to Prof. Fisher, that the total deposits are inflated

11) H. Neisser, "Umlaufsgeschwindigkeit der Bankdepositen," in Handwörterbuch des Bankwesens, 1933, S. 570. Keynes, *op. cit.*, Vol. 1, p. 32.

to the extent of pending clearings.[12] Should a similar situation prevail in this country, such an amount of clearing should be deducted from the quantity of deposit money, together with other portions of deposits as enumerated above.

A question must now be raised in this connection, namely, as to whether the demand deposits known in this country as special current deposits may be considered to comprise a part of deposit currency. For reasons above stated, a substantial portion of the funds, which would ordinarily be kept in current accounts, is being kept in special current deposits, except at month-end or year-end periods of payment. Accordingly, this may constitute an important element in the determination of the quantity of deposit currency.

In the event that the quantity of deposit currency is computed solely on the basis of demand deposits kept in banks, there arises the difficulty that this sum does not include the amount of overdrawn checks. Strictly speaking, therefore, unused overdraft must be added as a part of deposit currency. According to the studies made by the Tokyo Clearing House, which has estimated the probable amount of unused overdrafts from the total amount of actual overdrafts, during the past twenty years, the probable amount of unused overdrafts has ranged between 30 % and 70 % of the total current account balances.[13]

It is apparent from the foregoing discussion that in estimating the volume of deposit currency in Japan, there are various problems that must be considered. In fact, it is almost impossible to make an accurate estimate from the data that are made available today. The national banks in operation, in the early years of Meiji, already held a relatively large amount of current deposits.[14] The first clearing house in Japan was opened in Osaka as early as 1879.

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12) I. Fisher, The Purchasing Power of Money, 1926, p. 437.

13) Tokyo Clearing House, *The Quantity and the Velocity of Deposit Currency, Oct.* 1937.

14) M. Nakatani, *A Study in Deposit Currency, op. cit.*

However, it was only after the inauguration of the gold standard system in 1897 that deposit money began to play an important part in our financial activities. Hence, let us assume, though admitting incompleteness in method and data, that the deposit currency of Japan is represented by the average of the total current deposits kept at the end of each semi-yearly period by ordinary commercial banks and by various special banks, other than the Bank of Japan. Table 1 represents the quantity of deposit currency computed on the above-mentioned basis for each ten-year period since the beginning of the present century.

Table No. 1.

Quantity of Deposit Currency (in units of 1,000 yen)

Year	Special Banks	Ordinary Banks	Total
1900	8,685	167,580	176,265
1910	28,398	371,084	399,483
1920	211,365	1,157,518	1,368,884
1930[15]	133,592	1,147,059	1,280,651
1939 (end of March)	141,776	2,200,426	2,362,202

This table indicates that the quantity of our deposit currency has increased remarkably during the past forty years. It has been shown elsewhere that there has been a progressive increase in the amount of unused overdrafts, the recent increase amounting to much as 70 % of the total current deposits. In case, therefore, the figures reported in Table 1 are increased, in accordance with the proportions of unused overdrafts estimated by the Tokyo Clearing House, nemely, 30 % for 1910, 50 % for 1920, 60 % for 1930, and 70 % for 1939 (end of March), we would at once realize

15) Decrease in the figures for 1930 reflects the shrinkage in financial activities resulting from the lifting of the gold embargo, the stabilization of Government finances, etc.

what truly remarkable increases had actually taken place in the quantity of deposit currency in this country.

For the sake of reference, the value of notes issued by the Bank of Japan for the years reported in Table 1 is quoted below.

Table No. 2.

Average value of Notes Issued by the Bank of Japan in units of 1,000 yen)

Year	Value
1900	205,722
1910	303,731
1920	1,191,884
1930	1,139,866
1939 (end of March)	2,149,088

IV

Let us now turn our attention to the problems involved in the estimation of the velocity of deposit currency. The theory of the velocity of deposit currency ultimately reduces to the theory of the velocity of the circulation of money; in regard to which question we are greatly indebted to the excellent studies of such students as Feilen,[16] Holtrop,[17] Keynes,[18] and more recently Marget.[19] Accordingly, I shall here dispense with a theoretical discussion of this subject, confining myself to a few brief statements which will serve to emphasize the importance of studies of the velocity of deposit currency.

The question of the velocity of deposit currency is usually discussed in connection with the problems of com-

16) J. Feilen, Die Umlaufsgeschwindigkeit des Geldes, 1923.

17) M. Holtrop, "Die Umlaufsgeschwindigkeit des Geldes," Beiträge zur Geldtheorie, 1933.

18) J. M. Keynes, *op. cit.*

19) A. W. Marget, *op. cit.*

modity prices, and is taken up in relation to the exchange formula which is based upon the quantity theory of money. However, there are those who regard the velocity of money not as an independent factor, but as a factor involved in the quantity of money itself. Should it be granted that the quantities of goods and money remained unchanged, the question of the velocity of circulation of money would become entirely meaningless. Otherwise considered, the increase or the decrease in the velocity of circulation becomes an important factor. It is for this reason that Burgess,[20] Snyder,[21] Mitchell[22] and others have endeavored to prove that changes in the velocity of circulation of deposit money reflect themselves in business cycles. In Japan, although there are some who claim that the total amount of checks issued in any given year is identical with the total amount of deposit currency, and that the velocity of circulation is 1, I do not concur in such a point of view. Furthermore, I think it is important to analyse, as Keynes[23] and Neisser[24] have done, the various channels of circulation of deposit currency. But in this study I do not propose to enter further into these problems.

It can now be stated that the velocity of deposit currency can be estimated by dividing the total amount of checks drawn against current deposits during a certain period of time, say, one year, by the average balance of current deposits (deposit money), against which the checks are drawn. This seemingly easy procedure for arriving at an estimate is accompanied, in practice by many difficulties, especially in connection with the handling of statistical data. These are similar to the difficulties invariably encountered by students in other countries. It may be recalled that in the

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20) W. R. Burgess, " Velocity of Bankdeposits," Quarterly Publication of the American Statistical Association, 1923.

21) C. Snyder, Business Cycles and Business Measurements, 1927.

22) W. C. Mitchell, Business Cycles, p. 125.

23) J. M. Keynes, *op. cit.*, Vol. 1, pp. 34, 35, 44, 45, 47, 248—255.

24) H. Neisser, *op. cit.*, S. 568.

well-known statistical study of Prof. Fisher in his formula, only four numbers out of fourteen denominators were actual figures, the rest merely representing estimated numbers. Moreover, the figures for the numerators represented only the amounts of checks credited into accounts; those not even including the values of checks cashed.[25] Even the more recent studies, like those of Burgess, Snyder, and Mitchell, were completed only after much manipulation and adjustment.[26] In England, where Edie and Weaver[27] and also Keynes[28] have produced important works, the difficulties must have been even greater, in view of the fact that only combined figures for current accounts and deposit accounts are reported, and furthermore, because of the existence of a relatively small number of large banks, a great many of the checks issued by the banks upon themselves are not included in the clearings.

The studies in this department of science has only been undertaken in Japan in recent years, despite the fact that the necessity for such studies has been felt for sometime. The delay has largely been due to the lack of statistical data. Nevertheless, considerable progress has been achieved during the past several years.

V

The first effort in this country to study the velocity of deposit currency was made by Prof. Tanaka in 1932, and then successively by the present writer, by Prof. Okita and by Prof. Tanaka again. Later, in 1937, the Tokyo Clearing House undertook similar studies on a large scale. While all of these undertakings agree as to their methods of computation, namely, division of total amount of checks issued in one year by the average balance of current deposits, upon

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25) Fisher, *op. cit.*, pp. 344, 283, 443—446.

26) Nakatani, *A Study of Deposit Currency*, *op. cit.*, pp. 281—286.

27) L. D. Edie and D. Weaver, "Velocity of Bank Deposits in England," Journal of Political Economy, Vol. 38, No. 4.

28) *Op. cit.*, Vol. II, pp. 31—33.

which ckecks are issued, each study pursues an independent method in the computation of the numerators and denominators of the equation.

In analyzing the study made by Prof. Tanaka[29] (covering the period 1915—1930), we observe that, like Prof. Fisher, he takes as numerator the total amount of funds credited to current accounts. With a belief that some modification of clearing figures would yield a more accurate number, I made a more detailed study for the years 1917 to 1932.[30] As the procedure followed in this connection is too complicated to describe in this short treatise, I shall content myself with the following brief reference. From the total amount of clearings for any given year, which had been accurately reported, deduction were made, first, of the amount of bank drafts issued for remittance purposes, second, of drafts and checks issued for call loan transactions, and third, of other items cleared for purposes other than payment. Furthermore, additions were made to such figures of the amounts of all transfers made from one account to another within one bank, and not sent through clearing. These additions and subtractions then yielded the figures for the numerators. Denominators were provided by averaging current account balances reported by all the clearing house banks in the country.

This procedure being somewhat complicated, Professor Tanaka[31] and Okita[32] (whose studies covered the periods 1913—1933 and 1914—1931, respectively) adopted as their data the list published in the Annual Report of the Bank Bureau, which showed the semi-annual increases in current deposits of all banks in the country. From these data, they computed the amount of decrease in current deposits, or the figures

29) Kinji Tanaka, "*The Velocity of Deposits and Payment Reserve.*" Kokumin Keizai Zassi, Vol. 53, No. 6.

30) Nakatani, *A Study in Deposit Currency, Op. cit.* pp. 193—199. I have also computed by a simpler method, the velocity of bank deposits for the years after 1880 (ref. *ibid.* pp. 248—266).

31) K. Tanaka and H. Shinjo, *Bank Management*, pp. 94—100.

32) B. Okita, *The Velocity of Circulation of Deposit Currency* (Pamphlet).

necessary as numerators, by means of the following equation :

Total deposits at end of previous term+total increase during the current term−total deposits at end of current term =total decrease in current term. Prof. Okita went a step further and obtained numerators by adding to the figure obtained by the above equation the total amount of overdrafts advanced during the current term.

Thus, in the studies made in the velocity of deposit currency in this country, the methods adopted for the computation of the total value of checks issued in one year vary widely ; some students making use of total credits to current accounts, others starting with the amount of clearing, while still others adopt the decreases in current accounts. Each of these methods contain certain merits as well as demerits, and it is practically impossible to pass any judgement as to which is the most satisfactory procedure.

With the outbreak of the China Incident, the necessity for statistical studies in deposit currency began to be felt even more keenly, with the result that the Tokyo Clearing House began to undertake research in this direction on a large scale. The procedure followed in this study resembles mine in that the total amount of payment checks issued in one year is computed carefully from the amount of clearings, and is divided by the yearly average of current deposit balances[33] reported by all clearing house banks for each week-end and month-end, plus current overdrafts. While this method of computation is too involved to be described here in detail, the results of these studies appear to be highly reliable, inasmuch as they are carried out by an organization which claims great facilities in gathering statistical data.

By way of summary, I shall compare in Table 3 (on next page) the results obtained by the various students whose works I have referred to above.

In conclusion, I shall attempt to evaluate the results obtained by these statistical studies. As regards the com-

33) Arithmetical average per year of week-end and month-end balances

Table No. 3.

Velocity of Circulation of Deposit Currency

Year	Tanaka I	Nakatani	Okita	Tanaka II	Tokyo Clearing House	
					Ia	IIb
1912					55.72	41.08
1913				33.24	57.58	41.32
1914			39.25	31.61	52.10	37.26
1915	27.48		35.74	30.06	48.58	35.68
1916	37.28		45.78	37.93	56.39	43.54
1917	38.87	42.39	49.88	41.78	60.30	47.83
1918	50.86	55.42	61.60	51.78	97.88	54.35
1919	56.95	77.46	75.09	60.06	118.04	79.73
1920	57.74	72.25	71.60	58.21	95.74	62.24
1921	47.73	62.55	58.90	48.80	89.51	59.35
1922	45.53	64.26	55.74	45.23	90.98	57.16
1923	39.49	54.84	49.06	39.07	88.98	56.91
1924	43.66	64.06	54.13	44.28	103.39	64.62
1925	48.92	70.81	63.16	49.89	118.83	73.49
1926	53.50	77.06	66.70	54.10	121.55	74.22
1927	46,44	63.13	56.37	45.52	91.30	54 88
1928	54.24	66.31	99.56	54.06	96.98	62.26
1929	53.90	68.90	66.36	53.83	95.57	63.26
1930	49.37	58.57	59.18	48.01	85.16	51.78
1931		70.48	63.20	51.10	94.21	54 14
1932		67.10		54.83	94 63	53.09
1933				58.41	101.40	59.42
1934					97.37	57.25
1935					93.86	55.25
1936					102.49	59.24

Notes: a.=Denominators consist of current deposits alone.
b.=Denominators consist of current deposits plus overdrafts.

putation of denominators, studies which in themselves cover a sufficient number of banks make no allowance for overdrafts, while others which include overdrafts are restricted in the sources from which materials are gathered. As for the figures representing the velocity of deposit currency, those relatively low in value appear to indicate the true situation more closely than those higher in value. Despite

these criticisms, however, it does not appear that the statistical studies undertaken in this country in connection with deposit currency are inferior to those produced in other countries. Furthermore, future progress in this field of scientific study seems to be ensured by the fact that an organization like the Tokyo Clearing House has already undertaken research of this nature. In addition to publishing the above-mentioned studies in October 1937, this institution has published subsequently similar statistics for each month from 1927, index numbers for seasonal fluctuations and also statistical tables showing funds demanded at the end of each month and of each half-yearly period, in terms of bank notes and also of deposit currency. Should these efforts be continued in the future, we may expect to be provided before long with complete financial statistics for this country, particularly in the field of currency statistics.

VI

In this short treatise, I have attempted to show what progress has been achieved, within a short space of time, in the studies in deposit currency in this country. In view, however, of the limited space available, I have discussed in the main methods that have been adopted in statistical studies, avoiding the more theoretical phases of the subject. I have endeavored to show, first of all, what constitutes deposit currency in this country, and secondly, what considerations should be made in estimating the quantity of deposit currency. I have tried also to introduce various methods that have been adopted in the computation of the velocity of deposit currency. A relatively large number of pages had to be devoted to the discussion of the nature of deposit currency because the composition of bank deposits in Japan is dominated by special circumstances peculiar to this country. In other words, business funds in this country were formerly represented by current deposits, while income mony was received in cash. Accordingly, special current deposits

represented an element that had to be taken into consideration in determining the quantity of deposit currency. In recent years, however, there has been a considerable increase in business money kept in the form of deposit currency, along with an increase in the use of deposit currency as income money. Hence this difficulty will eventually decline in importance.

It can be stated in conclusion that along with the remarkable increments attained in deposit currency during the past ten years, there has been a steady development of public interest in the subject. As a result we have witnessed very rapid progress in the scientific studies of deposit currency, in the theoretical as well as in the statistical field.